Espacenet

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Indicating device for vehicle.

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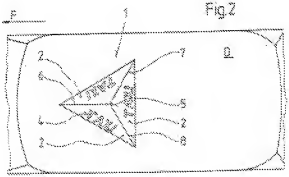
Abstract of EP 0415194 (A2)

An indicating device for attachment to the roof of a motor vehicle, consisting in a closed box with display symbols and/or lettering such as "Taxi", "Police" or the like. In order to reduce its air resistance and at the same time in order to ensure that the information (4) on it can be perceived on all sides, the box (1) is constructed in the form of a pyramid



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Notice

Description EP0415194

DISPLAY PLATE FOR MOTOR VEHICLES

The invention relates to a display sign for attachment to the roof of a motor vehicle, consisting in a closed box with display symbols and / or instruction labels such as "Taxi," "police" or the like

In a prior art illuminated sign box for mounting on the vehicle roof, with one in it integrable, display symbols or reference labels having, beam-like neon sign, has the latter on a roof-like curved shape with two parallel straight bottom edge and two also parallel but curved side edges. It can be a constant having the shape of the corresponding side edges, preferably parabolic cross-section The illuminated sign box itself is like a roof rack to be clamped to the two longitudinally extending gutters. The structure of the illuminated sign box and the mounting thereof on the vehicle roof are made such that the ingress of water between carriers and between carriers and roof and neon sign can be prevented it should impose as well as through the surface with a curvature of illuminated sign box and shaped in the case of the investment in an automatic car wash car wash will run over by brush rollers allows the illuminated sign box

Although this proposed design of the illuminated sign box of flow markedly cheaper than older Signs with cuboid shape appears, but the air resistance of the illuminated sign box according to this proposal especially at highway speeds, not negligible An advertising technically overweight. another disadvantage of the illuminated sign box geschildeter type is that only the necessary information attached to the front and the back of it and so can only be read from the direction or the opposite direction. Also, the mounting or dismounting of the illuminated sign box in question is necessary in each case with the fixed or unscrewing of gripping claws a bit cumbersome

The invention has as its object to provide a display sign for vehicles, which avoids the disadvantages of the known. It is with good advertising effectiveness of an aerodynamic design exhibit. Furthermore, a simplified, quick handling as possible when applying the indicator plate on the vehicle roof and the reclaiming of the same is desirable

The problem is solved in accordance with the invention of the GUIDE feature training by the body of claim 1.

Owing to its wedge like form of the invention is subject to the wind against a significant lower resistance than a bar shaped and in the air stream with a corresponding length of the vehicle width transverse illuminated sign box. The obliquely upwardly extending three faces of the pyramid-shaped box on all sides allow visibility of information attached to them.

Features a particularly advantageous further embodiment of the invention are the subject of the dependent claims 2 to 13

The invention is further illustrated by way of preferred example embodiments in accordance with the drawings.

In the drawings:

1 shows a side view of an embodiment of a display sign for vehicles according to the invention in operating position in the partially cut-away roof of a motor vehicle,
2 shows a plan view of the display sign of FIG 1,
3 is a view of the display sign according to the FIG1 and 2 from below,
4 shows a view of another embodiment of a display sign for vehicles according to the invention from below,
5 is a side view of the display plate of FIG 4 in operating position in the partially cut away roof of a motor vehicle, and
6 is a sectional view of a portion of the display sign according to the figures 4 and 5, along the section plane AA

The in Figures 1-6 illustrated display plate for attachment to the roof of a motor vehicle is in a closed box that can be provided with display symbols and / or instruction labels such as "Taxi," "police" or the like According to the invention is designed in the box 1 as a pyramid. This relatively simple, streamlined and therefore more fuel-efficient shape is also an all-round visibility of information attached to it At each of the obliquely upwardly extending side surfaces 2 of the operating position with its base 3 to the vehicle roof D facing box 1 are each a Note label 4 vorgesehen Innerhalb the contours of the latter, the side faces 2 obtain translucent and the box inside is at least one light source so that the visibility of the said notice is ensured even in the dark

The pyramid-shaped box has a particularly advantageous design with an asymmetrical one transverse to the direction F of the vehicle considered, stresses on wedge-like profile. It is oriented in the operating position in the direction of travel F diagonally upward to the pyramid tip 5 extending edge of the box 6 1 for longer than the other two, also in the top five pyramid converging edges 7, designed to 5th

The base of the pyramid-shaped box one must not necessarily be trained as a triangle. A streamlined shape of the box 1 and an all-round visibility of information attached to 4 is guaranteed, for example, in a pyramid with a square footprint, especially when looking in the direction of the edges are longer than the other two edges

The attachment of the box on the vehicle roof 1 D can be particularly useful magnetic, which exist between the base 3 of the former and the surface of the latter 3 remains a gap. Figure 1 and Figure 3

show a possible embodiment of the fastening device 9 the fastening device 9 is in the form of a corner 10, which in plan view, has double-T shape This advantageously has a form of a recess for connecting beam 11, in turn, on the roof of the vehicle D facing side of the base 3 is attached to the box 1. It is advisable to provide at each of the four ends of the double-T beam 10 each, a permanent magnet 12.

Another embodiment of the fastening device 9 is shown in Figures 4 through 6

The attachment is here using only three permanent magnets 112 which are slidably mounted on two rails 113, 114 linear. The rails themselves are so on the roof of the vehicle D underside facing the triangular-shaped, flat base surface 3 of the fixed body 1, that the one, the shorter rail 113 in direction F of the vehicle up, close to the facing in the same direction corner of the base 3 extends. The shorter rack 113 takes on a permanent magnet 112th The other, longer bar 114 is perpendicular to the shorter 113 and also parallel to the rail, looking forward F, rear side edge of the base 3 between the two corners pointing sideways and the latter carries two permanent magnets 112th

This arrangement of the rails 113, 114 should be such that the mounting of the display plate such that the base of the pyramid-shaped body 1 occupies one substantially horizontal position, even on vehicles is possible that is so-called sun roof or a TV equipped with rifle R Roof exhibit.
To fasten the box 1 on a vehicle roof D parmitalitly advantageous permanent magnets 112 are circular cylindrical shape

As an embodiment, the following mean to be specified:
Shorter length of the rail 113, L1 = 350 mm
Length of the longer rail 114, L2 = 650 mm
Diameter of the permanent magnets 112, d = 100 mm
Adjustment for magnet 112 on rail 113, b = 250mm
Adjustment for final of 112 magnetic rail 114, b = 450 mm

It is also possible, not two permanent magnets 112 to be arranged together on a rail, but for each of the permanent magnets have a separate Rail shall be provided to, each point of the roof of the vehicle D underside facing the base is 3 of the fixed body 1, that the basic surface 3 no attachment of the body 1 on a vehicle roof D by multiple displacement of the permanent magnets 112 on the rails, a substantially horizontal portion can take

An optimal plat ement of the box 1 on a non-continuous flat roof of the vehicle D can also be guaranteed even then under certain circumstances, if only one of the permanent magnets 112 is slidable on a rail and the other permanent magnets fixed to the base 3 of the attached box 1

It is also recommended to fix the permanent magnets 112 to move spatially restricted, at least at the base 3 of the box 1 This can happen, depending on an elastic body, for example, a mid-range has a reduced diameter, cylindrical (dotted-like) element 115 made of rubber. The anchoring of each permanent magnet 112 by means of the central bore of element 115 passing through bolt 117, with the associated nut 118 in the associated rail 113 or 114 C-shaped profile is recorded. The element 115 is wrapped onto the permanent magnet 112thThe described arrangement is exemplified by the attachment of the two, viewed in direction F, Illustrates the rear of the permanent magnets 112 in FIG.6, a side view of said arrangement is in a section along the section plane AA according to Figure 5

It would also be the steering wheel in one of the permanent magnets 112 with the aid of ball joints imaginable.

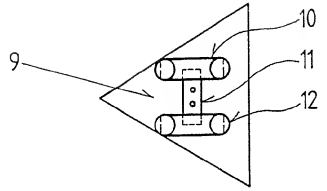
In the manner described here at an optimal adaptation of the permanent magnets 112 on any vehicle roof and therefore the development of the maximum holding power available through the same

The length extends from the base surface 3 of the box 1 in the direction of the pyramid tip 6 extending edges 6, 7 and 8 can also be such that these have no common intersection, but that its not the points of the base 3 and points forming the vertices of a tr, form the essential Tiche parallel surface. The box 1 has in this case the form of a "truncated" pyramid.

As of this embodiment can also mutually parallel edges 6, 7 and 8 are provided.

This results in a prism-like body, whose parallel three longitudinal edges advantageously shorter than the side edges of its two triangular-shaped faces are dimensioned and should be with one of its triangular faces of the roof base D and is oriented with its longitudinal edges in the direction F.Another possibility is a prism-like body with diamond-shaped horizontal section

Fig.3



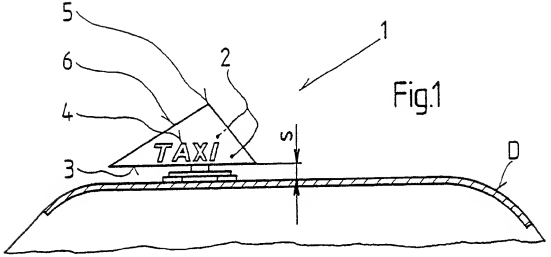


Fig.1

Fig.2

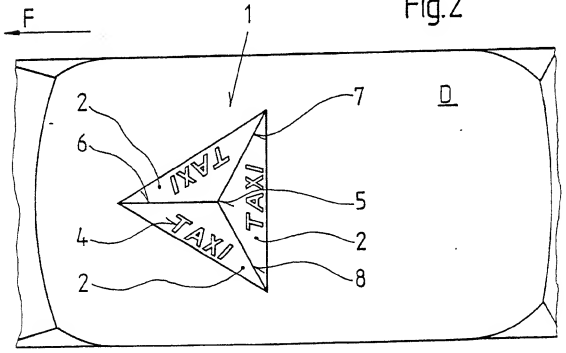


Fig. 4

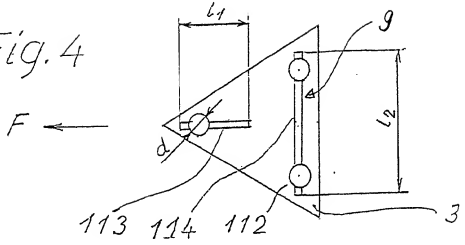
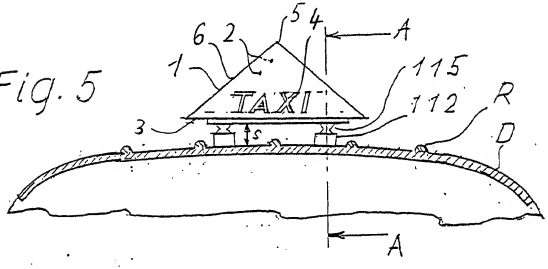


Fig. 5



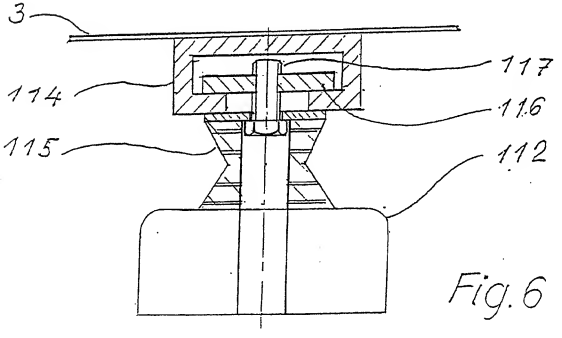


Fig. 6